



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



In reply refer to:  
1-1-06-F-0071

**MAR 21 2006**

Mr. Gene Fong  
Division Administrator  
U. S. Department of Transportation  
Federal Highway Administration  
650 Capitol Mall, Suite 4-100  
Sacramento, California 95814

Subject: Amendment to the Biological Opinion for the Lincoln Bypass Project,  
Placer County, California (Service File Number 1-1-04-F-0119).

Dear Mr. Fong:

This is in response to a January 4, 2006, letter from the Federal Highway Administration (FHWA) to the U.S. Fish and Wildlife Service (Service), requesting reinitiation of formal consultation on the Lincoln Bypass Project (Service file number 1-1-04-F-0119) due to changes in the amount of vernal pool crustacean habitat present on the Rockwell-Mariner property. The Service received your request for reinitiation of consultation on January 5, 2006. At issue are the effects of the project on the federally threatened vernal pool fairy shrimp (*Branchinecta lynchei*), the endangered vernal pool tadpole shrimp (*Lepidurus packardii*) (vernal pool crustaceans), the threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), and proposed critical habitat for the vernal pool fairy shrimp. This letter revises the conservation measures for the vernal pool crustaceans, the effects of the proposed action on vernal pool crustaceans, the conclusion for vernal pool crustaceans, and the terms and conditions and amends these changes to the project's biological opinion, as appropriate. This amended biological opinion is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

The findings and recommendations in this consultation are based on: (1) the January 4, 2006, letter from the FHWA to the Service, requesting an amendment to the project's biological opinion; (2) a December 21, 2005, letter from the California Department of Transportation to the Service outlining the new information related to the amount of vernal pool crustacean habitat present on the Rockwell-Mariner property; (3) an August 2005, Mariner Property, Delineation of Jurisdictional Wetlands and Other Waters, prepared by LSA Associates, Inc.; (4) the Service's February 5, 2005, biological opinion on the Lincoln Bypass Project; and (5) other information available to the Service.

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IN AMERICA** 

**Received**

**MAR 22 2006**

**FHWA**

**Note:** On August 11, 2005, the Service re-designated critical habitat for the vernal pool tadpole shrimp and the vernal pool fairy shrimp. The re-designation of critical habitat resulted in a decrease in the amount of designated critical habitat for the vernal pool fairy shrimp in Placer County. No designated critical habitat for vernal pool tadpole shrimp is present in Placer County. As a result of the re-designation of critical habitat for the vernal pool fairy shrimp, the proposed project will result potential effects to less designated critical habitat (12.61 acres) than analyzed in the February 5, 2005, biological opinion (23.1 acres). However, we have not amended the sections of the biological opinion that address vernal pool fairy shrimp critical habitat, as our determination regarding the effects of the proposed action on designated critical habitat for the vernal pool fairy shrimp has not changed as a result of the new designation.

Therefore, the February 5, 2005, biological opinion is now amended to read:

**Pages 5-6: Change Conservation Measures (Vernal Pool Crustacean Species) from:**

Vernal Pool Crustacean Species

1. Habitat Preservation/Creation

Approximately 40.50 wetted acres of vernal pool crustacean habitat will be directly (26.94 wetted acres) and indirectly (13.56 wetted acres) affected by the proposed project (refer to Table 2). The project applicant has proposed to compensate acre for acre for the loss of function and value of these vernal pool crustacean habitats through the preservation of vernal pool crustacean habitat, located primarily in Placer County. Direct affects will be compensated through a combination of creation and preservation of vernal pool crustacean habitat. Indirect affects will be compensated through the preservation of vernal pool crustacean habitat. Therefore, prior to ground-breaking, the applicant will preserve in perpetuity approximately 97.59 wetted acres of existing vernal pool crustacean habitat, including 11.06 wetted acres on Aitken Ranch, approximately 79 wetted acres on the Rockwell-Mariner property, and 7.53 wetted acres at the Bryte Ranch Conservation Bank. In addition, the applicant will create approximately 10.35 wetted acres of vernal pool crustacean habitat at Aitken Ranch, which will be protected in perpetuity. Vernal pool crustacean habitat preservation and creation will be accomplished through the acquisition of specified properties, such as Aitken Ranch and the Rockwell-Mariner property in Placer County, and the purchase of vernal pool crustacean habitat credits Bryte Ranch Conservation Bank in Sacramento County (refer to Table 3).

**Table 2: Proposed Compensation for Vernal Pool Crustacean Habitat for the Route 65 Lincoln Bypass Project, Placer County, California**

	<b>Acreage Affected</b>	<b>Acres of Preservation</b>	<b>Acres of Creation</b>
<b>Direct Total</b>	26.94	70.47	10.35
<b>Indirect Total</b>	13.56	27.12	--
<b>TOTAL</b>	<b>40.50</b>	<b>97.59</b>	<b>10.35</b>

**Table 3: Proposed Conservation Areas to Create and Preserve Vernal Pool Habitat in Perpetuity for the Route 65 Lincoln Bypass, Placer County**

	<b>Aitken Ranch (in acres)</b>	<b>Rockwell- Mariner (in acres)</b>	<b>Bryte Ranch (in acres)</b>	<b>TOTAL ACREAGE</b>
<b>Preservation</b>	11.06	~79.00	7.53	97.59
<b>Creation</b>	10.35	--	--	10.35
<b>TOTAL</b>	<b>21.41</b>	<b>~79.00</b>	<b>7.53</b>	<b>107.94</b>

**To:**

Vernal Pool Crustacean Habitat

1. Habitat Preservation/Creation

Approximately 40.50 wetted acres of vernal pool crustacean habitat will be directly (26.94 wetted acres) and indirectly (13.56 wetted acres) affected by the proposed project (refer to Table 2). The project applicant has proposed to compensate for the loss of function and value of these vernal pool crustacean habitats through the preservation of vernal pool crustacean habitat, located primarily in Placer County. Direct affects will be compensated through a combination of creation and preservation of vernal pool crustacean habitat. Indirect affects will be compensated through the preservation of vernal pool crustacean habitat. Therefore, prior to ground-breaking, the applicant will preserve in perpetuity approximately 61.81 wetted acres of existing vernal pool crustacean habitat, including 11.06 wetted acres on Aitken Ranch, approximately 43.22 wetted acres on the Rockwell-Mariner property, and 7.53 wetted acres at the Bryte Ranch Conservation Bank. In addition, the applicant will create approximately 10.35 wetted acres of vernal pool crustacean habitat at Aitken Ranch, which will be protected in perpetuity. Vernal pool crustacean habitat preservation and creation will be accomplished through the acquisition of specified properties, such as Aitken Ranch and the Rockwell-Mariner property in Placer County, and the purchase of vernal pool crustacean habitat credits at Bryte Ranch Conservation Bank in Sacramento County (refer to Table 3).

**Table 2: Proposed Compensation for Vernal Pool Crustacean Habitat for the Route 65 Lincoln Bypass Project, Placer County, California**

	<b>Acreage Affected</b>	<b>Acres of Preservation</b>	<b>Acres of Creation</b>
<b>Direct Total</b>	26.94	48.25	10.35
<b>Indirect Total</b>	13.56	13.56	--
<b>TOTAL</b>	<b>40.50</b>	<b>61.81</b>	<b>10.35</b>

**Table 3: Proposed Conservation Areas to Create and Preserve Vernal Pool Habitat in Perpetuity for the Route 65 Lincoln Bypass, Placer County**

	<b>Aitken Ranch (in acres)</b>	<b>Rockwell- Mariner (in acres)</b>	<b>Bryte Ranch (in acres)</b>	<b>TOTAL ACREAGE</b>
<b>Preservation</b>	11.06	43.22	7.53	61.81
<b>Creation</b>	10.35	--	--	10.35
<b>TOTAL</b>	<b>21.41</b>	<b>43.22</b>	<b>7.53</b>	<b>72.16</b>

**Page 28-29, Effects of the Proposed Action: Change Habitat Preservation from:**

Habitat Preservation

To offset the permanent loss of habitat for listed vernal pool crustaceans, the applicant has proposed such conservation measures as the creation, acquisition, permanent preservation, and management of up to 107.94 wetted acres of vernal pool crustacean habitat. One of the proposed preservation areas includes the 317-acre Aitken Ranch. The 317-acre Aitken Ranch Mitigation Site was established by Wildlands, Inc., a private habitat development company, to preserve and create habitat to offset the habitat losses which result from development in Placer County. This property has approximately 21.16 wetted acres of created or preserved vernal pools and vernal swales, in addition to other habitat features, and vernal pool fairy shrimp are known to occur on this property. Caltrans purchased these habitat preservation and creation values in advance of environmental document approval to ensure that these resources are protected in perpetuity (Caltrans 2003).

The project proponent has also proposed to acquire the approximately 800-acre Rockwell-Mariner property, located south of Wise Road and west of Dowd Road, northwest of the City of Lincoln. This property has an estimated 79 wetted acres of vernal pool crustacean habitat, all within designated critical habitat for the vernal pool fairy shrimp. This figure has not been confirmed by ground truth techniques or delineation. The presence of listed vernal pool crustaceans are inferred within suitable habitat along the proposed project alignment, including the Rockwell-Mariner property (LSA 2004c). In addition, the project proponent has further proposed to purchase the equivalent of 7.53 acres of vernal pool habitat preservation credits at Bryte Ranch Conservation Bank located in Sacramento County. Bryte Ranch and the proposed project site are located within the same Southeastern Sacramento Valley Vernal Pool Region, as defined in the Service's *Draft Recovery Plan for Vernal Pool Ecosystems of California and*

*Southern Oregon* (2004). The vernal pool crustacean habitats found on the two sites, however, are not comparable in quality and characteristics. Vernal pool crustacean habitat located on Bryte Ranch is qualitatively different from that found on the proposed project site for several reasons, including: 1) Bryte Ranch is located outside of designated critical habitat for the vernal pool fairy shrimp; 2) the soil types found on Bryte Ranch are different from those found on the proposed project site (LSA 2004c); 3) Bryte Ranch is located on a different geo-morphological surface than the proposed project site; and 4) within this Vernal Pool Region, Bryte Ranch is located within the Mather Core Area and the proposed project site is located within the Western Placer County Core Area. According to the Draft Recovery Plan (Service 2004), these core areas were established based on the understanding that these support viable populations of vernal pool species and/or will contribute to the connectivity of habitat and, thus, the increase of dispersal opportunities between populations. The preservation and enhancement of each core area is important to maintain and possibly expand the distribution of vernal pool species range-wide (Service 2004).

Of the 107.94 wetted acres of vernal pool crustacean habitat that the project proponent has proposed to protect in perpetuity, approximately 97.59 of this is existing habitat, and approximately 90.06 acres are located in western Placer County. Of this existing habitat that is proposed to be protected, approximately 81 percent, or approximately 79 acres, is located within designated critical habitat for the vernal pool fairy shrimp in western Placer County. The permanent protection of 90.06 acres of existing vernal pool crustacean habitat in western Placer County will achieve approximately a 69 percent rate of vernal pool crustacean habitat preservation in western Placer County, and likewise, represent approximately a 31 percent rate of vernal pool crustacean habitat loss therein.

**To:**

Habitat Preservation

To offset the permanent loss of habitat for listed vernal pool crustaceans, the applicant has proposed such conservation measures as the creation, acquisition, permanent preservation, and management of 72.16 wetted acres of vernal pool crustacean habitat. One of the proposed preservation areas includes the 317-acre Aitken Ranch. The 317-acre Aitken Ranch Mitigation Site was established by Wildlands, Inc., a private habitat development company, to preserve and create habitat to offset the habitat losses which result from development in Placer County. This property has approximately 21.16 wetted acres of created or preserved vernal pools and vernal swales, in addition to other habitat features, and vernal pool fairy shrimp are known to occur on this property. Caltrans purchased these habitat preservation and creation values in advance of environmental document approval to ensure that these resources are protected in perpetuity (Caltrans 2003).

The project proponent has also proposed to acquire the approximately 800-acre Rockwell-Mariner property, located south of Wise Road and west of Dowd Road, northwest of the City of Lincoln. This property has an estimated 43.22 wetted acres of vernal pool crustacean habitat. The presence of listed vernal pool crustaceans are inferred within suitable habitat along the

proposed project alignment, including the Rockwell-Mariner property (LSA 2004c). In addition, the project proponent has further proposed to purchase the equivalent of 7.53 acres of vernal pool habitat preservation credits at Bryte Ranch Conservation Bank located in Sacramento County. Bryte Ranch and the proposed project site are located within the same Southeastern Sacramento Valley Vernal Pool Region, as defined in the Service's *Draft Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (2004). The vernal pool crustacean habitats found on the two sites, however, are not comparable in quality and characteristics. Vernal pool crustacean habitat located on Bryte Ranch is qualitatively different from that found on the proposed project site for several reasons, including: 1) Bryte Ranch is located outside of designated critical habitat for the vernal pool fairy shrimp; 2) the soil types found on Bryte Ranch are different from those found on the proposed project site (LSA 2004c); 3) Bryte Ranch is located on a different geo-morphological surface than the proposed project site; and 4) within this Vernal Pool Region, Bryte Ranch is located within the Mather Core Area and the proposed project site is located within the Western Placer County Core Area. According to the Draft Recovery Plan (Service 2004), these core areas were established based on the understanding that these support viable populations of vernal pool species and/or will contribute to the connectivity of habitat and, thus, the increase of dispersal opportunities between populations. The preservation and enhancement of each core area is important to maintain and possibly expand the distribution of vernal pool species range-wide (Service 2004).

Of the 72.16 wetted acres of vernal pool crustacean habitat that the project proponent has proposed to protect in perpetuity, approximately 61.81 acres of this is existing habitat, and approximately 54.28 acres are located in western Placer County. None of the existing habitat that is proposed for protection is located within designated critical habitat for the vernal pool fairy shrimp in western Placer County. The permanent protection of 54.28 acres of existing vernal pool crustacean habitat in western Placer County will achieve approximately a 56 percent rate of vernal pool crustacean habitat preservation in western Placer County, and likewise, represent approximately a 44 percent rate of vernal pool crustacean habitat loss therein. The Service's *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Portland, Oregon* (2006), recommends a preservation rate of at least 85 percent in the western Placer County core area. The proposed project does not, on its own, achieve the recommended recovery goal for listed vernal pool species in the region. The Service is concerned that the recovery of the vernal pool fairy shrimp and vernal pool tadpole shrimp may not occur unless this rate of loss is addressed by other means.

**Page 33: Change Conclusion (Paragraphs 1 and 2) from:**

**Conclusion**

After reviewing the current status of the beetle, vernal pool fairy shrimp, and vernal pool tadpole shrimp, the environmental baselines for the area covered by this biological opinion, the effects of the proposed project, and the cumulative effects, it is the Service's biological opinion that Route 65 Lincoln Bypass project, as proposed, is not likely to jeopardize the continued existence of these species. Although the proposed project is likely to affect designated critical habitat for the vernal pool fairy shrimp, the conservation measures that have been proposed by the project

proponent are sufficient to offset the loss of designated critical habitat of the vernal pool fairy shrimp.

We base this determination for the vernal pool crustaceans on the understanding that the acquisition and conservation of at least 107.94 wetted acres of suitable vernal pool crustacean habitat, including 97.59 acres of existing vernal pool crustacean habitat and 10.35 acres of created vernal pool crustacean habitat, should offset the direct and indirect effects of the proposed action.

**To:**

### **Conclusion**

After reviewing the current status of the beetle, vernal pool fairy shrimp, and vernal pool tadpole shrimp, the environmental baselines for the area covered by this biological opinion, the effects of the proposed project, and the cumulative effects, it is the Service's biological opinion that Route 65 Lincoln Bypass project, as proposed, is not likely to jeopardize the continued existence of these species. Although the proposed project is likely to affect designated critical habitat for the vernal pool fairy shrimp, the conservation measures that have been proposed by the project proponent are sufficient to offset the loss of designated critical habitat for the vernal pool fairy shrimp.

We base this determination for the vernal pool crustaceans on the understanding that the acquisition and conservation of at least 72.16 wetted acres of suitable vernal pool crustacean habitat, including 61.81 acres of existing vernal pool crustacean habitat and 10.35 acres of created vernal pool crustacean habitat, should offset the direct and indirect effects of the proposed action, though not at the preservation ratios suggested in the Service's *Draft Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (2004).

### **Page 39, Terms and Conditions: Change Vernal Pool Crustaceans (i) from:**

- i. The project proponent has proposed to offset direct and indirect effects of vernal pool crustacean habitat loss through a combination of habitat preservation and creation offsite. Therefore, prior to ground-breaking, the applicant shall preserve in perpetuity at least 107.94 wetted acres, including 97.59 acres of existing and 10.35 acres of created, vernal pool crustacean habitat. The preservation of vernal pool crustacean habitat will be accomplished through the acquisition of specified properties, such as Aitken Ranch and the Rockwell-Mariner property in Placer County. Additional preservation will occur through the purchase of equivalent vernal pool habitat preservation credits commensurate with acreage commitment at the Bryte Ranch Conservation Bank in Sacramento County. The creation of vernal pool crustacean habitat will occur on Aitken Ranch.

**To:**

- i. The project proponent has proposed to offset direct and indirect effects of vernal pool

crustacean habitat loss through a combination of habitat preservation and creation offsite. Therefore, prior to ground-breaking, the applicant shall preserve in perpetuity at least 72.16 wetted acres of vernal pool crustacean habitat, including 61.81 acres of existing and 10.35 acres of created, vernal pool crustacean habitat. The preservation of vernal pool crustacean habitat will be accomplished through the acquisition of specified properties, such as Aitken Ranch and the Rockwell-Mariner property in Placer County. Additional preservation will occur through the purchase of equivalent vernal pool habitat preservation credits commensurate with acreage commitment at the Bryte Ranch Conservation Bank in Sacramento County. The creation of vernal pool crustacean habitat will occur on Aitken Ranch.

The other portions of the project description, status of the species, environmental baseline, effects analysis, incidental take statement, reasonable and prudent measures, terms and conditions, and conservation recommendations in the February 2, 2005, biological opinion remains the same.

This concludes formal consultation with the FHWA on the Proposed Route 65 Lincoln Bypass project. As provided in 50 CFR §402.16, re-initiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation.

Please contact Mary Hammer or Holly Herod, Sacramento Valley Branch Chief, at (916) 414-6645 if you have questions regarding this amendment to the biological opinion for Route 65 Lincoln Bypass project.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kenneth Sanchez', written over a horizontal line.

Kenneth Sanchez  
Acting Field Supervisor

cc:

ARD-ES, Portland Oregon

Mr. Kent Smith, California Department of Fish and Game, Rancho Cordova, California

Mr. Tim Vendlinski, Environmental Protection Agency, San Francisco, California

Ms. Katrina Pierce, California Department of Transportation, Marysville, California



### **LITERATURE CITED**

California Department of Transportation. 2003. Indirect and Cumulative Impact Analysis for Lincoln Bypass—Route 65, Placer County, California. May. 34 pp. + Attachments.

LSA Associates, Inc., 2004c. Draft Mitigation and Monitoring Proposal, Route 65 Lincoln Bypass, Placer County, California. November. Prepared for the U.S. Department of Transportation. 102 pp. + Appendices.

U. S. Fish and Wildlife Service. 2006. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Portland, Oregon. xxii + 574 pages.